AMENDMENTS TO THE SPECIFICATION

Please amend the paragraphs on page 4, lines 12 to 25, as follows:

Fig. 13 is a perspective view of the rotor ~~plate~~ that forms a part of the centrifuge assembly shown in Figs. 10 to 12, showing the latch assembly which releasably secures the processing chamber to the centrifuge assembly, the latch assembly being shown in its chamber retaining position;

a1

Fig. 14 is a side section view of the rotor ~~plate~~ shown in Fig. 13, showing the components of the latching assembly as positioned when the latch assembly is in its chamber retaining position;

Fig. 15 is a side section view of the rotor ~~plate~~ shown in Fig. 13, showing the components of the latching assembly as positioned when the latch assembly is in its chamber releasing position;

Please amend the paragraph on page 17, lines 7 to 15, as follows:

a2

As illustrated (see Figs. 10 and 11), the centrifuge assembly 48 includes a <u>frame or</u> yoke 154 having bottom, top, and side walls 156, 158, 160. The yoke 154 spins on a bearing element 162 (Fig. 11) attached to the bottom wall 156. An electric drive motor 164 is coupled to the bottom wall 156 of the yoke 154, to rotate the yoke 154 about an axis 64. In the illustrated embodiment, the axis 64 is essentially horizontal (see Fig. 1), although other angular orientations can be used.

Please amend the paragraphs that begin on page 17, line 16, and end on page 18, line 15, as follows:

A rotor ~~plate~~ 166 (see Fig. 11) spins within the yoke 154 about its own bearing element 168, which is attached to the top wall 158 of the yoke 154. The rotor ~~plate~~ 166 spins about an axis that is generally aligned with the axis of rotation 64 of the yoke 154.

a3

As Fig. 7 best shows, the top of the processing chamber 18 includes an annular lip 380, to which the lid 150 is secured. As Fig. 12 shows, the rotor ~~plate~~ 166 includes a latching assembly 382 that removably grips the lip 380, to secure the processing chamber 18 on the rotor ~~plate~~ 166 for rotation.

The configuration of the latching assembly 382 can vary. In the illustrated embodiment (see Figs. 13 to 15), the latching assembly 382 includes a latch arm 66 pivotally mounted on a pin in a peripheral recess 68 in the rotor ~~plate~~ 166. The latch arm 66 pivots between a retaining position (shown in Figs. 13 and 14) and a releasing position (shown in Fig. 15).

In the retaining position (see Fig. 14), an annular groove 70 on the underside of the latch arm 66 engages the annular lip 380 of the processing chamber 18. The annular groove 70 on the latch arm 70 coincides with an annular groove 71 that encircles the top interior surface of the rotor ~~plate~~ 166. The engagement of the lip 380 within the groove 70/71 secures the processing chamber 18 to the rotor ~~plate~~ 166.

In the releasing position (see Fig. 15), the annular groove 70 is swung free of engagement of the annular lip 380. This lack of engagement allows release of the processing chamber 18 from the remainder of the groove 71 in the rotor ~~plate~~ 166.

In the illustrated embodiment, the latching assembly 382 includes a sliding pawl 72 carried in a radial track 74 on the top of the rotor ~~plate~~ 166. In the track 74, the pawl 72 slides radially toward and away from the latch arm 66.

Please amend the paragraph on page 19, lines 6 to 11, as follows:

a4

In the illustrated embodiment (see Fig. 13), the top wall 158 of the yoke 154 carries a downward depending collar 82. The collar 82 rotates in unison with the yoke 154, relative to the rotor ~~plate~~ 166. The collar 82 includes a sidewall 84 that is continuous, except for a cut away or open region 86.

Please amend the paragraphs beginning on page 19, line 26, and ending on page 20, line 27, as follows:

a5

The interference between the collar sidewall 84 and the key element 88 of the pawl 72 prevents manual movement of the pawl 72 away from the latch arm 66, to unlock the latch arm 66 for movement into its releasing position, unless the open region 86 and the key element 88 register. The open region 86 is aligned on the yoke 154 so that this registration between the open region 86 and the key element 88 occurs only when the rotor ~~plate~~ 166 is in a prescribed rotational position relative to the yoke 154. In this position (see Fig. 12), the sidewalls 160 of the yoke 154 are located generally parallel to the plane of the opening to the compartment, providing open access to the interior of the yoke 154. In this position (see Fig. 16), the processing chamber 18 can be freely placed without interference into the interior of the yoke 154, and loaded onto the rotor ~~plate~~ 166. In this position, uninhibited manual movement of the pawl 72 allows the operator to pivot the latch arm 66 into its releasing position, to bring the lid 150 of the chamber 18 into contact against the rotor ~~plate~~ 166. Subsequent release of the pawl 72 returns the pawl 72 toward the latch arm 66 and

allows the operator to lock the latch arm 66 in its retaining position about the lip 380 of the chamber 18. The reverse sequence is accommodated when it is time to remove the processing chamber 18 from the rotor ~~plate~~ 166.

This arrangement makes possible a straightforward sequence of acts to load the processing chamber 18 for use and to unload the processing chamber 18 after use (see Fig. 16). As Figs. 17 and 18 further show, easy loading of the umbilicus 296 is also made possible in tandem with fitting the processing chamber 18 to the rotor ~~plate~~ 166.

A sheath 182 on the near end of the umbilicus 296 fits into a preformed, recessed pocket 184 in the centrifuge station 20. The pocket 184 holds the near end of the umbilicus 296 in a non-rotating stationary position aligned with the mutually aligned rotational axes 64 of the yoke 154 and rotor ~~plate~~ 166.

Please amend the paragraph beginning on page 20, line 33, and ending on page 21, line 5, as follows:

a6

Umbilicus support members 186 and 187 (see Fig. 12) are carried by a side wall 160 of the yoke 154. When the rotor ~~plate~~ 166 is located in its prescribed rotational position to enable easy loading of the chamber 18 (see Figs. 17 and 18), the support members 186 and 187 are presented on the left side of the processing chamber 18 to receive the umbilicus 296 at the same time that the sheath 182 and fixture 338 are manipulated for fitting into the pocket 184.

Please amend the paragraphs beginning on page 22, line 3, and ending on page 22, line 27, as follows:

a7

During operation of the centrifuge assembly 48 (see Figs. 19 to 22), the support members 186 and 187 carry the umbilicus 296 so that rotation of the yoke 154 also rotates the umbilicus 296 in tandem about the yoke axis. Constrained within the pocket 184 at its near end (i.e., at the sheath 182) and coupled to the chamber 16 at its far end (i.e., by the mount 178), the umbilicus 296 twists upon the surfaces 188 and 190 about its own axis as it rotates about the yoke axis 64, even as the surfaces 188 and 190 inhibit radial travel of the umbilicus relative to the rotation axis 64. The twirling of the umbilicus 296 about its axis as it rotates upon the surfaces 188 and 190 at one omega with the yoke 154 (typically at a speed of about 2250 RPM) imparts a two omega rotation to the processing chamber 18 secured for rotation on the rotor ~~plate~~ 166.

The relative rotation of the yoke 154 at a one omega rotational speed and the rotor ~~plate~~ 166 at a two omega rotational speed, keeps the umbilicus 296 untwisted, avoiding the need for rotating seals. The illustrated arrangement also allows a single drive motor 164 to impart rotation, through the umbilicus 296, to the mutually rotating yoke 154 and processing chamber 18 carried on the rotor ~~plate~~ 166. Further details of this arrangement are disclosed in Brown et al U.S. Patent 4,120,449, which is incorporated herein by reference.